10

15

20

25

30

9

weight;

- -- maximum content of particles having a diameter of 0.06 mm: 18% by weight;
- -- maximum content of granules having a diameter of 4 mm: 15% by weight;
  - -- maximum diameter of the contained granules: 8 mm

The hopper 2 poured a 2-cm layer of this soil onto a conveyor belt 3.

Immediately thereafter, a seeding machine 4 planted at an appropriate depth the following mixture of seeds:

- -- 50-60% of 2 different varieties of Lolium perenne;
- -- the remaining 50-40% of 3 different varieties of Poa pratensis.

This was followed by a hopper 5 which deposited chemical fertilizer and, in a downward location, a hopper 6 which deposited selective herbicide.

The layer thus obtained was then divided into blocks shaped like a parallelepiped by a die-cutter 7.

The blocks were then immersed in a tank 8, which contained a natural bonding agent which adhered, forming a layer on the entire outer surface, and while setting wrapped and protected the block, which would otherwise have been rather brittle. The same compacting can be achieved by spraying bonding agent onto the sods within a suitable chamber.

The block covered by set bonding agent, if kept dry, did preserve itself for a long time without using impermeable enclosures, whereas once it was laid and regularly watered the natural bonding agent dissolved and rapidly degraded, leaving the block free.

By placing the blocks on a layer of gravel prepared on-site and by watering them systematically, the sports green developed normally.

The behavior of the sods illustrated in the above examples is simply that of carrying out natural biochemical and physical activities of the soil, already mentioned above in connection with the production processes.

The invention is susceptible of numerous modifications and variations,

10

15

20

25

30

10

all of which are to be considered as falling within the scope of the invention. Thus, for example, the invention can be used not only for generating a lawn or a grassy layer, but also for floral borders used on the edges of ornamental lawns or pillows, wisps and cascades of flowers in flowerbeds. The invention is particularly suitable for perennial flowers which easily reproduce by seeds.

The invention can also be applied to edible species, such as many vegetables, which reproduce well from dry-stored seeds.

Almost all vegetables, even bulky ones (for example pumpkins and eggplants) can develop well in a few centimeters of thickness. One must also consider that some aromatic plants (such as basil and parsley) are not used in large amounts and require very little space and an extremely small amount of soil. The invention is therefore very convenient for anyone who wishes to make, for example, a "hanging kitchen-garden".

The invention can also be used with inferior plants, such as the subkingdom Thallophyta and for mushroom cultivation.

The invention is applicable to all kinds of reproduction in the plant kingdom: i.e. sexual reproduction, asexual reproduction and vegetative reproduction.

A number of definitions in the present specification are given hereafter for correct interpretation of the claims:

Seed: the term designates the reproductive germs of phanerogam cormophyte plants, but is used here with a necessarily broader meaning, extending it to the entire plant kingdom, and is meant to indicate these parts of the plants that are designed for their germination, whether derived from gamic, agamic or vegetative reproduction. These parts can therefore be constituted by seeds, spores, rhizomes, bulbs and bulbils, gems, tubers or parts thereof, fragments of branches or of other parts of the plant.

Seeding bed: a material, usually fertile soil, in which germination of plants and development of their underground parts are possible.

15

20

5

11

**Texture or grading:** the percentage ratio among the various solid particles of the soil, graded according to their dimensions. The graded parts of the soil are constituted by the skeleton and fine earth, which, in turn, comprises coarse sand, fine sand, silt and clay.

Structure and porosity: the concept given in the specification is repeated for the sake of clarity: colloidal substances such as humus and clay cause the structure of fertile soil to become an aggregation of glomerules rather than a compact mixture of components, so that one obtains an adequate porosity which is useful for the growth of plants. Said porosity is due to micropores, which are internal to the glomerules and useful for absorbing water, and to macropores between the glomerules that are useful for air circulation, which is a very important factor for the roots. The porosity of the sod can also assist in drawing, by capillary action, water from underground if watering is insufficient.

**Organic substance:** a substance comprising plant or animal residues in a more or less advanced state of decomposition. The substance can be already partially transformed by soil-dwelling organisms and microorganisms into elementary inorganic substances and humus.

The disclosures in Italian Patent Application No. VR99A000021 from which this application claims priority are incorporated herein by reference.